HEALTH AFFAIRS

Military Health System
Information Management and Information Technology

Performance Management
Concept of Operations

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Information Management, Technology & Reengineering

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EXECUTIVE SUMMARY

The Military Health System (MHS) Information Management and Information Technology (IM/IT) Performance Management Program is a process involving measurement, analysis, reporting, and integration of performance information into strategic planning and portfolio management. This program provides executive MHS decision-makers with valid and quantifiable performance information to effectively manage and provide oversight of MHS IM/IT investments and the management process. (See Exhibit 1, page 2.)

The goal of performance management is to ensure that the MHS links performance and program progress to mission and strategic goals and objectives, makes funding decisions in light of project and activity benefits and outcomes that support those goals and objectives, and actively manages projects and activities to ensure that the planned benefits are realized.

Together, mission, acquisition, and corporate performance measures constitute MHS Chief Information Officer (CIO) portfolio performance information. The MHS Information Management Benefits Management Program provides MHS functional community managers with a process to quantify and measure mission performance. The MHS Information Technology (IT) community monitors cost, schedule, and technical performance. The Service CIOs, the Program Executive Officer for IT, and the Information Management, Technology & Reengineering directors measure their corporate performance in terms of meeting the goals and objectives of the MHS IM/IT Strategic Plan.

Performance data are collected in a variety of data analysis and reporting tools. An executive suite of displays of acquisition, mission, and corporate performance measures is currently under development. The automated reporting capability for performance data will be the management tool to allow all levels of management to aggregate or drill down performance information to support IM/IT decisions.

The MHS IM/IT Performance Management Program is a business improvement program. It focuses on mission accomplishment and helps managers objectively track business processes and activities that will ensure the strategic goals and objectives are achieved.

PERFORMANCE MANAGEMENT
CONCEPT OF OPERATIONS

1. INTRODUCTION

1.1 Purpose and Scope

The Military Health System (MHS) Information Management and Information Technology (IM/IT) Performance Management (PM) Concept of Operations (CONOPS) defines the framework and methodology for PM. The MHS IM/IT PM CONOPS is a companion document to the MHS IM/IT CONOPS and applies to all MHS IM/IT staff elements involved with, or directly responsible for, MHS IM/IT PM activities.

1.2 Background

The Government Performance and Results Act of 1993 requires government executives to focus on defining missions, setting goals, measuring performance, and reporting accomplishments. In addition, with the passage of the Federal Acquisition Streamlining Act of 1994 and the Information Technology Management Reform Act of 1996, performance-based and results-based decision-making is now required for all major investments in Information Technology (IT). These laws reinforce financial accountability, emphasize results-based management, define cost performance and schedule goals, and improve the acquisition of IT. To implement this guidance, Department of Defense developed guidance for managing IT as an investment and how to measure IT performance during each life cycle phase. The IT investment process is illustrated at Appendix B.

2. MHS IM/IT PERFORMANCE MANAGEMENT

Performance management is a process involving measurement, analysis, reporting, and integration of performance information into strategic planning and portfolio management. The goal of performance management is to ensure that the MHS links performance and program progress to mission and strategic goals and objectives. This is accomplished by selecting and funding initiatives in light of project and activity benefits and outcomes that support those goals and objectives, actively managing projects and activities to ensure that the planned benefits are realized, and evaluating IT capabilities after they have been deployed to ensure that the IT investments continue to deliver the expected benefits.

All levels of MHS IM/IT management will generate performance information. Data will be collected in a variety of performance management data analysis and reporting tools. An executive suite of performance measures and displays of acquisition, mission, and corporate measures will be exhibited for senior leadership management.

Five main program tenets must be met to implement MHS IM/IT Performance Management. The requirements include the following:

1.   Managers at all levels will be held accountable for performance and results.
2.   Decisions will be based on hard evidence.
3.   Top management will own and be directly involved in performance activities.

4.   Functional and technical communities will partner to optimize IT resources.
5.   All levels of management will adopt a continuous improvement philosophy.

2.1   Performance Management Framework

Exhibit 1 below depicts how performance management is integrated into the basic MHS IM/IT program management processes of (1) functional requirements management, (2) executive decision-making, and (3) acquisition management oversight.

EXHIBIT 1

MHS PERFORMANCE MANAGEMENT FRAMEWORK

Military Health System Information Management and Information Technology
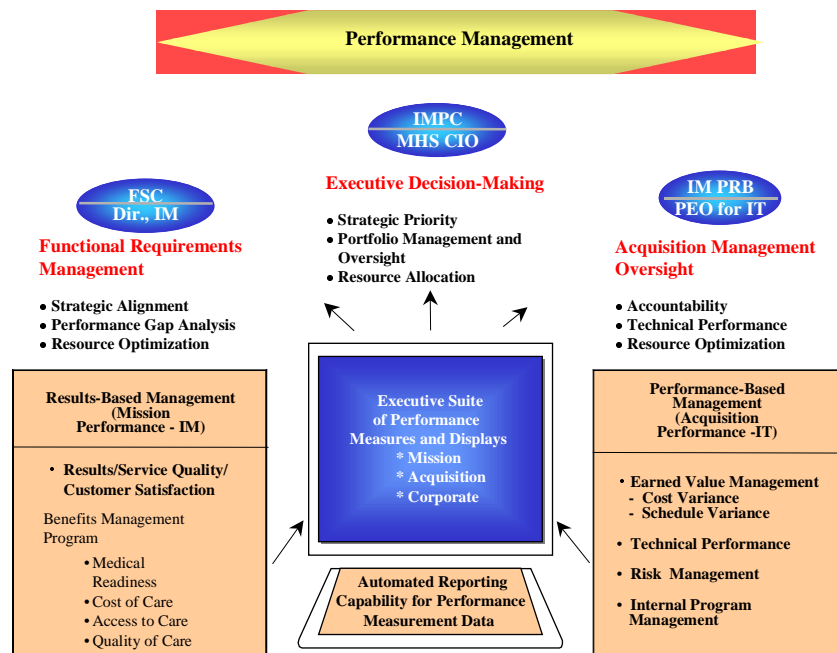
The Information Management Proponent Committee (IMPC) and the MHS Chief Information Officer (CIO) will consider performance information when making resource allocation **(select)** and strategic and capital planning decisions. Performance information will also be used to monitor the organization's progress toward achieving strategic goals and objectives (**control and evaluate).** Additionally, managers at all levels will assess the value of selected performance measures. Indicators that do not add value to the management and oversight process will be revised or eliminated and other more meaningful measures defined.

2.2 Performance Management Roles and Responsibilities

The MHS IM/IT community will have an organizational structure to support effective and efficient management of Information Management (IM) and IT performance. The Performance Management Steering Committee (MHS CIO chair, Program Executive Officer (PEO) for IT, and the Director of IM) will manage and oversee performance activities.

IMPC

- Use performance data to manage control processes
- Use performance information to manage and oversee IT investments
- Fund workforce training in performance management

Performance Management Steering Committee (MHS CIO, PEO for IT, Director of IM)

- Meet monthly to review MHS IM/IT program performance
- Manage and oversee performance management activities

MHS CIO

- Chair the Performance Management Steering Committee
- Verify and validate IM/IT performance data
- Publish policy that supports results-based, performance-based management
- Provide the automation tools to facilitate the availability of performance data

Director of IM

- Coordinate mission performance with the functional steering committee (FSC), functional communities, Council of Colonels, and Surgeons General offices

- Facilitate developing, prioritizing, and tracking of functional requirements

- Monitor end-user satisfaction

- Monitor, aggregate, and report mission performance

- Use Benefits Management Program Return-on-Investment (ROI) information in setting IT funding priorities

MHS IT PEO

- Coordinate budget execution performance requirements with Information Management Program Review Board (IMPRB)

- Hold technical program managers accountable for cost, schedule, and technical performance for IT investments

- Monitor, aggregate, and report IT acquisition performance

3. MHS IM/IT PERFORMANCE MEASUREMENT

3.1 Performance Measure Hierarchy

To effectively manage and provide oversight of MHS IM/IT investments and the management process, executive MHS decision-makers need valid and quantifiable acquisition, mission, and corporate performance information. MHS IM/IT program managers collect data to support three types of operational measures: mission, acquisition, and corporate performance measures. Performance measures are further defined at two management levels within the MHS: portfolio and operational.

1.   Portfolio-level performance measures—At the executive level, the MHS CIO monitors organizational performance from the broad perspective that encompasses every aspect of the IM/IT business process.

2.   Operational-level performance measures—At the operational level, the Director of IM and the PEO aggregate mission and acquisition performance measurement data. In addition, the Information Management, Technology & Reengineering (IMT&R) directors measure the performance of corporate business processes, and the Service CIOs collect performance data on Service specific IM/IT activities.

    a.   *Results-Based Performance (Mission Performance)*—Monitoring and reporting of results-based performance (mission-results) are the responsibilities of the MHS Information Management community. The Director of IM is accountable to the MHS CIO for defining IM investment benefits (financial and non-financial returns of IT projects), linking these benefits to the MHS strategic goals and objectives, establishing performance targets, and measuring progress.

    b.   *Performance-Based Performance (Acquisition Performance)*—The PEO and the technical program managers provide the MHS CIO with performance-based (acquisition) information concerning cost, schedule, and technical performance of IT investments.

    c.   *Corporate Performance*—The IMT&R directors, the PEO for IT, and Service CIOs are responsible for defining their contribution to the MHS IM/IT Investment Management process. Activities include information security, capital asset management, strategic planning, performance management, Y2K compliance, business process reengineering,

Computer-Assisted Practice Program, and staff training and development functions. These activities include linking their support functions to the MHS IM/IT Strategic Plan, measuring performance of defined activities, and reporting results to the MHS CIO.

3.2 Process for Performance Measurement

This process is applicable to all types of performance measurement. It begins with assessment of organizational goals and objectives and ends with a quantitative assessment of the extent to which these goals and objectives have been satisfied. As the performance measurement process matures, actual trend information from prior performance measurement activities will be factored into the current year's annual goals.

Process for Performance Measurement
1. Examine the MHS IM/IT Strategic Plan goals and objectives.
2. Develop operational business objectives.
3. Map key processes and activities.
4. Evaluate existing business measurements.
5. Develop business (and individual) performance measures.
6. Establish organizational structures and procedures to support operational objectives and strategic goals.
7. Collect live data.
8. Measure and report quarterly.

3.3 Performance Management Implementation

Mission, acquisition, and corporate performance measures constitute MHS CIO portfolio performance information.

1. Mission performance measures will be defined by the functional community through the MHS Benefits Management Program (BMP), which is an integral component of the overall MHS Performance Management Program.

2. Acquisition performance measures will be defined through a coordinated effort of technical program managers. Consistent and standard reporting of acquisition performance will enhance the IT investment management process.

3. Information Management, Technology & Reengineering directors will define corporate performance measures to quantify their added value to support IT investment management. Service CIOs will establish performance measures that quantify progress toward goals and objectives defined in the MHS IM/IT Strategic Plan.

Mission Performance

The MHS IM BMP provides MHS functional community managers with a process to quantify and measure the contribution that IM/IT investments make to accomplish the health care mission. The BMP defines how benefits are determined, evaluated, documented, and integrated into the executive-level decision process. IM/IT benefits are calculations of operational impact, quantified in terms of MHS cost of care, access to care, quality of care, and medical readiness benefits. The BMP results in improving IM/IT capabilities that support business process reengineering within the MHS. The BMP provides a complete feedback loop to ensure that the MHS strategic goals are being met by the IM/IT investment.

Program Office managers responsible for tracking functional issues will report mission performance to the Director of IM who will, in turn, aggregate the data to create a portfolio perspective of MHS mission performance. The Director of IM will provide reports. In addition, data and mission performance summary reports will be entered into the Automated Reporting Capability for Performance Measurement Data and be available electronically to senior health care executives through an executive suite of performance measures and displays.

These measures are critical during select and evaluation phase of the IT investment process. Data will feedback into the strategic planning and IT investment prioritization process. Performance data analysis and trending will assist managers in identifying opportunities to streamline the IT investment select phase processes.

Acquisition Performance

The MHS IT community monitors cost, schedule, and technical performance of IT investments. Program Office technical program managers will report acquisition performance to the PEO who will, in turn, aggregate the data to create an IT investment portfolio perspective of MHS acquisition performance. The PEO will meet with the CIO monthly and provide formal reports quarterly. In addition, data and acquisition performance summary reports will be entered into the Automated Reporting Capability for Performance Measurement Data and be available electronically to senior health care executives through an executive suite of performance measures and displays.

These measures are critical during the control and evaluation phase of the IT investment process. Feedback from monitoring and evaluation will feed back into the strategic planning process and IT investment management and oversight. Acquisition data will assist managers in streamlining IT investment management processes.

Corporate Performance

IMT&R directors and Service CIOs will establish performance measures that quantify progress toward accomplishment of goals and objectives defined in the Strategic Plan for their area of responsibility. In addition, the PEO will gather and report corporate-level metrics to evaluate the efficiency and effectiveness of the IT organization. They will collect, analyze, and report corporate performance data. The results of the analysis will be reported quarterly to the Director of IMT&R. Corporate performance data and summary reports will be available electronically to senior health care executives through an executive suite of performance measures and displays.

The purpose of these measures is to identify opportunities for systemic improvement to the IT investment process. The senior management team will use this data to

4. MHS PORTFOLIO REPORTING CAPABILITY

4.1 Data Collection Strategy

Performance data will be collected and analyzed at all levels of management in the organization. The results of the measurement process will be reported to the next level of management for integration into the management and oversight process. At each level of management, data will be further aggregated and reported through the appropriate channel to the next higher authority. The highest level of reporting and final decision-making authority for IM/IT investments is the IMPC and the MHS CIO.

Automating performance information will facilitate reporting of collected data. Training and technical assistance will be provided to people who produce and use the IM/IT data.

A comprehensive enterprise IM/IT performance management process, currently under development, will meet real managerial and accountability needs; reflect important interdependencies and relationships across staff and program offices lines; and recognize that multiple, specialized data systems may no longer be affordable or consistent with other critical priorities. The proposed enterprise IM/IT performance process will have the following features:

- Partnering between the functional and technical communities and collaboration among Program Offices, Service CIOs, IMT&R Directorates, TRICARE Management Activity staff agencies, and contractors (TRICARE support contractors and IM/IT development contractors) will be supported by adequate resources and will recognize the essential needs and contributions of each participant.

- Automated data warehouse will promote linkage of comparable data and sharing of information. The confidentiality and security of sensitive information will be ensured.

- Supporting multiple purposes, including monitoring for performance-based accountability of cost, schedule, and technical performance and the contribution of IM/IT to accomplishing the mission. (It will serve the information needs of internal customers (TRICARE Executive Council, MHS CIO, MHS PEO for IT, Director of IM, Program Office program managers, project task managers, and IMT&R directors) and external customers (Command Control Communication and Intelligence, Inspector General, Congress, Department of Defense, CIO, PA&E, OIPT) to the MHS.)

4.2 MHS Performance Management Data Analysis and Reporting Capability

The MHS IM/IT Performance Management Program will provide the means for the MHS CIO to obtain timely executive-level information regarding the status of IM/IT programs and support activities across the MHS through a variety of data analysis and reporting tools. These tools will be automated and configured to produce an executive suite of performance measures and displays. The information views will bring together data that are currently not reviewed together—acquisition management data, benefits management program data, and corporate performance data. Automating a link among these three information views will improve the quality of information available to senior managers at budget decision points and will create opportunities to reduce the overhead activities associated with IM/IT performance reporting and budget submissions.

4.3 MHS CIO Reports Module—CIOEXEC

The MHS CIO reports module will provide immediate results to the CIO without disruption to the IM/IT program office's activities. The CIOEXEC[1] provides a communications system that bridges the gap between goals set by high-level managers and the frontline program staff and contractor support whose performance is ultimately responsible for reaching them. Information is gathered from existing computer systems within the MHS.

CIOEXEC is deployable to the CIO, PEO, Director of IM, technical managers, and functional managers. This means support not only for corporate or organizational management but also for project management down to the program level. An essential requirement is for linked performance management systems with cascading sets of objectives providing the ability to define organizational-level performance measures and tie them into program performance measures based on the organization hierarchy. Support for both client and server and Web-enabled environments is critical to enterprise deployment of the performance management process to multiple users.

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[1] CIOEXEC is a term that represents the executive suite of performance measures and displays for the MHS Chief Information Officer.

The MHS IM/IT CIOEXEC will have a graphical user interface. It will have an intuitive, Windows-based user interface that enables users to simply point and click their way to information. It will enable users to visualize key information in both text and graphical format and drive a Windows-based environment, so users can view and provide assessments.

CIOEXEC will have both quantitative and qualitative, text-based, analysis capabilities and open network architecture. The MHS IM/IT CIOEXEC will be linked with automatic, assessment, and feedback loops.

The administrator will have the capability to organize as many groups and users as required for the organization. Complete security features will ensure privacy of particular safeguards for respective viewing audiences. User and group privileges will be assigned and centrally managed to selectively enable access to broader, controlled audiences.

5. MHS PERFORMANCE MANAGEMENT TRAINING

The entire MHS IM/IT workforce will need to be trained in general concepts of performance management and the specific aspects and application of these concepts to their areas of responsibility. They must clearly understand their responsibility and accountability to quantify operational objectives, how to develop useful performance measures, how to establish verifiable data collection and analysis processes, and, finally, how to integrate measurement information into the organization's management controls.

As the MHS PM data management and analysis capabilities expand, the workforce will need training on how to effectively use these tools to enhance data collection and reporting processes. Most important, all levels of management will need to be trained on how to interpret performance data so that the limitations of the measurement process can be clearly understood and factored into the decision-making process.
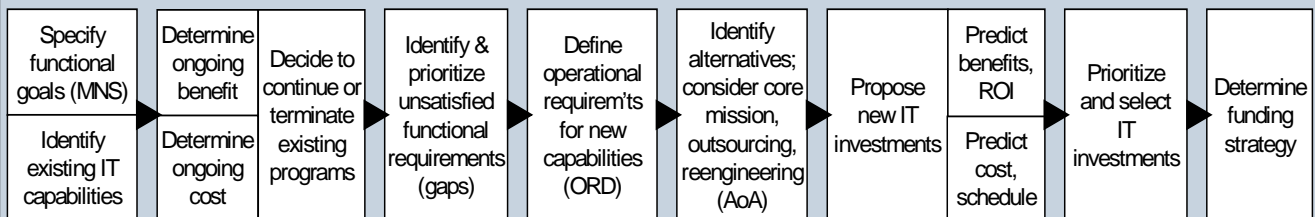
Enterprise-level Investment Management Process
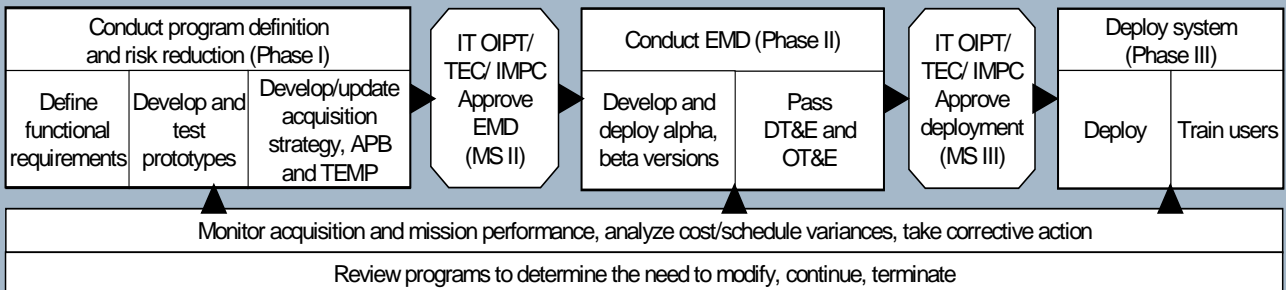
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Strategic Planning (precedes Capital Planning & Investment Control Process)

Select (Mission Area assessments, prioritize requirements, select portfolio)

Specify functional goals (MNS) / Identify existing IT capabilities	Determine ongoing benefit / Determine ongoing cost	Decide to continue or terminate existing programs	Identify & prioritize unsatisfied functional requirements (gaps)	Define operational requirem'ts for new capabilities (ORD)	Identify alternatives; consider core mission, outsourcing, reengineering (AoA)	Propose new IT investments	Predict benefits, ROI / Predict cost, schedule	Prioritize and select IT investments	Determine funding strategy

Control (Program Execution, interface with infrastructure)

Conduct program definition and risk reduction (Phase I)

Define functional requirements	Develop and test prototypes	Develop/update acquisition strategy, APB and TEMP

IT OIPT/ TEC/ IMPC Approve EMD (MS II)

Conduct EMD (Phase II)

Develop and deploy alpha, beta versions	Pass DT&E and OT&E

IT OIPT/ TEC/ IMPC Approve deployment (MS III)

Deploy system (Phase III)

Deploy	Train users

Monitor acquisition and mission performance, analyze cost/schedule variances, take corrective action

Review programs to determine the need to modify, continue, terminate

Evaluate (Operate systems, manage infrastructure, improve)

Conduct post-implementation review	Measure continued contribution of IT to the mission	Incorporate "lessons learned" into capital planning process/policy
Operate, maintain, and support deployed systems	Measure continued technical performance	
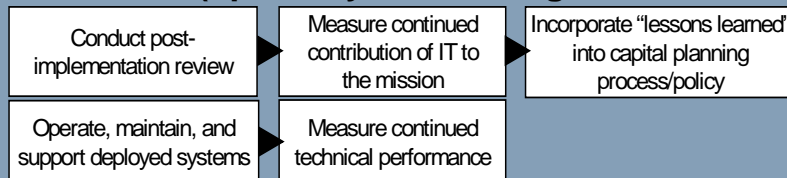
APPENDIX B

IT Investment Process

BMP   Benefits Management Program

CIO   Chief Information Officer

CONOPS   Concept of Operations

FSC   Functional Steering Committee

IM   Information Management

IM/IT   Information Management and Information Technology

IMPC   Information Management Proponent Committee

IMPRB   Information Management Program Review Board

IMT&R   Information Management, Technology & Reengineering

IT   Information Technology

MHS   Military Health System

OIPT   Overarching Integrated Product Team

PEO   Program Executive Officer

PM   Performance Management

APPENDIX B

IT Investment Process